

Aquatic Insects of California, as a long-flow fluctuating intermittent stream. In the Central Valley Foothill region of California such long-flow intermittent streams are common; it is not known how productive of Trichoptera others of these kind of streams may be.

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A NEW SPECIES OF *STETHORUS* WEISE FROM GUATEMALA NOW BEING RELEASED IN CALIFORNIA

(Coleoptera: Coccinellidae)

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In the winter of 1955, the junior author sent to the University of California at Riverside, Citrus Experiment Station, Department of Biological Control, a large number of live specimens of an undescribed species of *Stethorus* Weise found preying on avocado brown mites, *Oligonychus punicae* (Hirst), on avocado trees in Guatemala. This *Stethorus* was introduced into the United States in an attempt to establish it as a predator of Tetranychid mites.

Approximately 40,000 beetles have been released in citrus and avocado groves in seven California counties. In addition, 1,350 beetles have been sent to the Fruit Insects Laboratory of the United States Department of Agriculture at Orlando, Florida, for release there, and 300 beetles have been sent to the Texas Agricultural Experiment Station at Weslaco, Texas. At present it is not certain whether this *Stethorus* will become established in California.

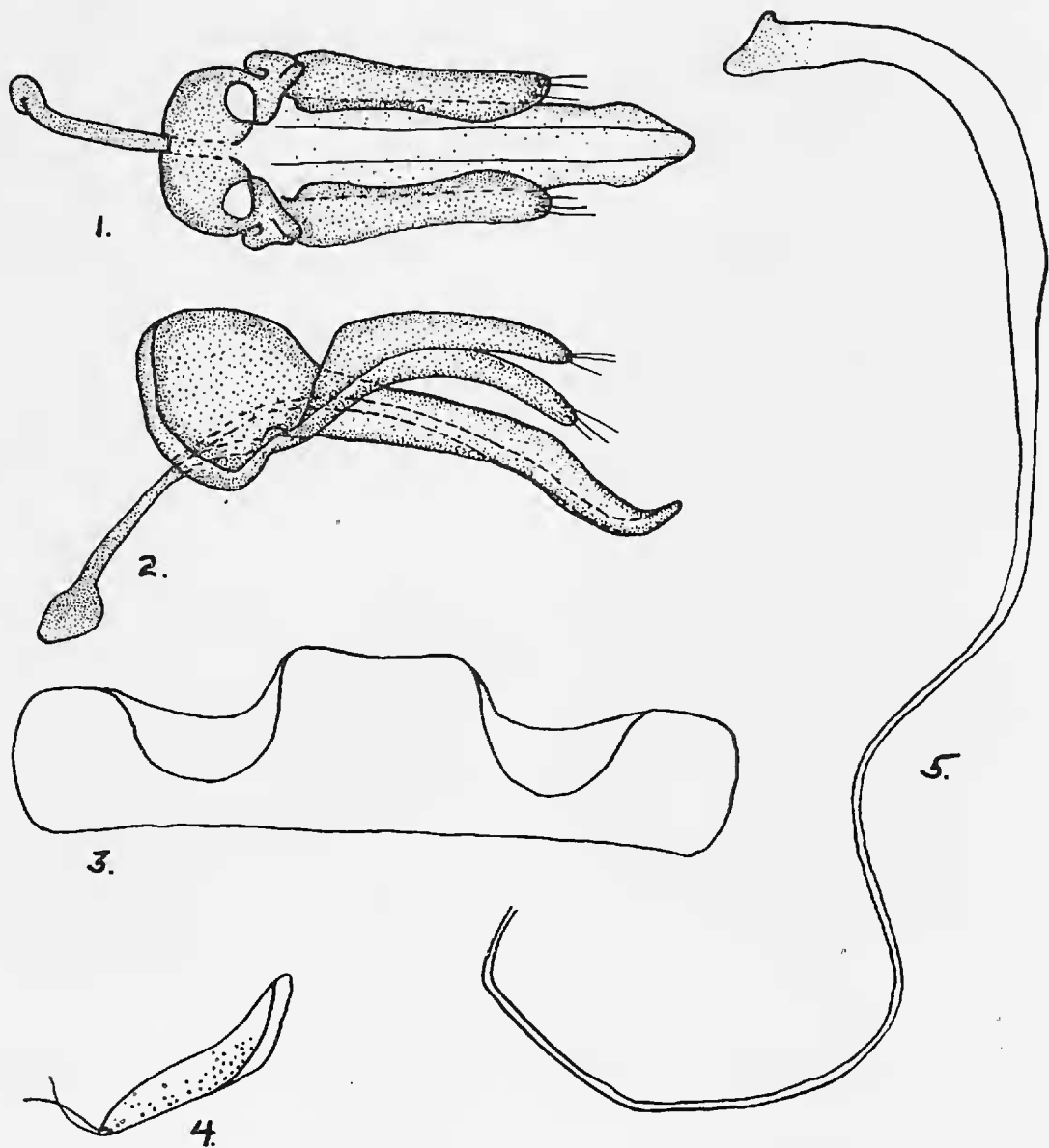
The following description is given at this time in order to make the name available for future publications and also to aid in its identification.

***Stethorus guatemalensis* Hall and Fleschner, new species**

In coloration *S. guatemalensis* is similar to *S. punctum* (Le Conte); the genitalia is very much like *S. picipes* Casey. *S. guatemalensis* may be distinguished from *S. punctum* by the sub-

parallel sides of the pronotum and the broad femoral lines, from *S. picipes* by the yellow legs and mouthparts.

Body black; antennae, clypeus, mouthparts, apex of femora, all of tibiae and tarsi yellowish; pubescence yellow, long, erect, and recurved as usual. Prothorax nearly twice as wide as long, sides continuous, not strongly converging; punctures coarse, feeble, and close set, slightly stronger on lateral margins. Elytra twice as long as broad (narrower than in *S. picipes*), punctures coarse, moderately strong, close set in middle, finer and closer together on sides. Pubescence of venter short, yellow, appressed. Femoral lines broad, extending two-thirds or more posteriorly on abdominal segment one; last visible sternite of male with a shallow, rounded depression in middle of posterior margin. Male genitalia (Fig. 1): Very much like *S.*



EXPLANATION OF FIGURES

Fig. 1, Dorsal view of aedeagus and associated parts. Fig. 2, Lateral view of the same. Fig. 3, First abdominal sternite. Fig. 4, Ninth abdominal sternite of the female. Fig. 5, Siphon.

picipes; siphon long, thick basally, thin apically; capsule bulbous, only slightly furcate; basal plates large, rounded; parameres short, thick, approximately two-thirds as long as the aedeagus, several short hairs at tip; trachea short, thin, apex swollen; aedeagus thick, apex in dorsal view, acutely rounded, lateral view, tip bent upwards at about a 45° angle. Ninth sternite of female, with each half acutely rounded at base, comparatively slender, apex pointed, with 2-3 long setae, longer than width of segment.

Only a very small amount of variation in the above mentioned characters has been noticed. The pubescence varies from yellow to white; the pale color of the mouth parts and legs may be yellow or orange; the femora are occasionally grayish in the middle only; femoral lines vary from half to two-thirds the length of the first abdominal segment.

Holotype and *allotype*: ANTIGUA, GUATEMALA, March 5, 1955 (C. A. Fleschner), from avocado; deposited in the collection of the California Academy of Sciences, San Francisco. Paratypes from material reared in the insectary of the University of California at Riverside are deposited in the U.S. National Museum, University of California at Berkeley and at Davis, and in the authors' collections.

S. guatemalensis has been released in the following counties in southern California: Ventura, Orange, San Diego, San Bernardino, Santa Barbara, Los Angeles, and Riverside. Releases have also been made in Texas and Florida.

BOOK REVIEW

A TEXTBOOK OF ENTOMOLOGY. Second Edition. By Herbert H. Ross. John Wiley & Sons, Inc., New York. xi+519. 1956. Price \$7.75.

This second edition of Ross' popular and well balanced Textbook of Entomology represents a considerable revision. Some of these changes are: the addition of recent data in many sections of the text, a new and pleasing style of type, a doubling of the number of references, the addition of treatments on the phylogeny of the Arthropoda and of the Insecta, an added treatment on population dynamics, modified or new keys for the identification of insect orders and families accompanied by more illustrations of diagnostic characters, a number of improvements in the illustrative material, and many other changes such as the correction of minor errors which are made possible by this second edition. Together these changes provide an authoritative and up-to-date textbook for the beginning entomologist and for the general zoologist who wish an introduction to this interesting group of animals. The changes in illustrations and particularly the full labeling of many anatomical structures will be a major aid to these students.—J. W. MACSWAIN, *University of California, Berkeley.*